9STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

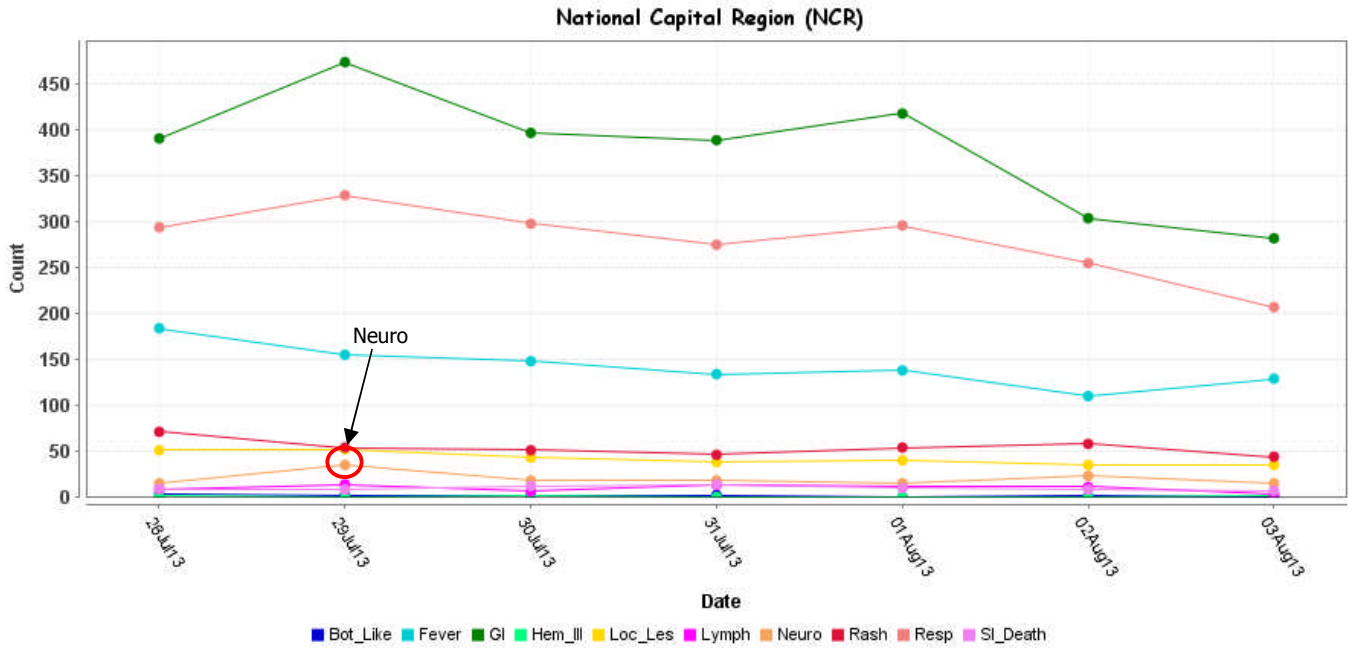
August 9, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:31
Reporting for the week ending 08/03/13 (MMWR Week #31)

CURRENT HOMELAND SECURITY THREAT LEVELS

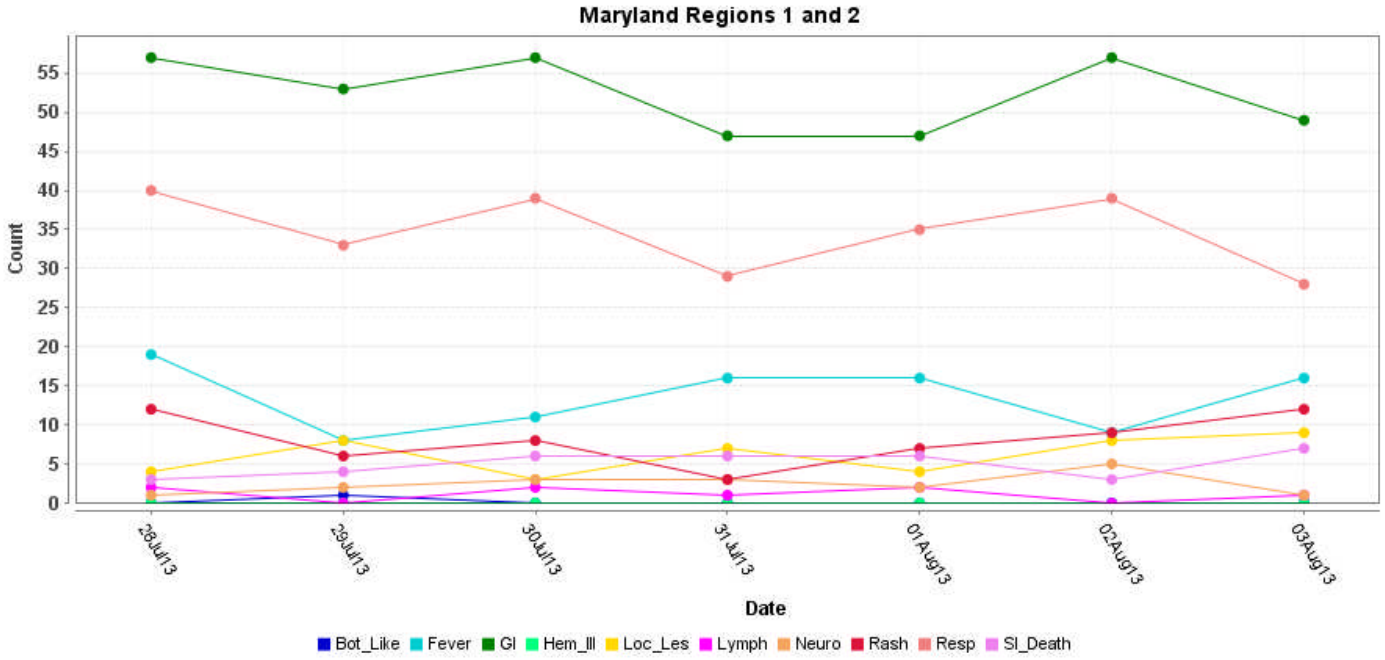
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

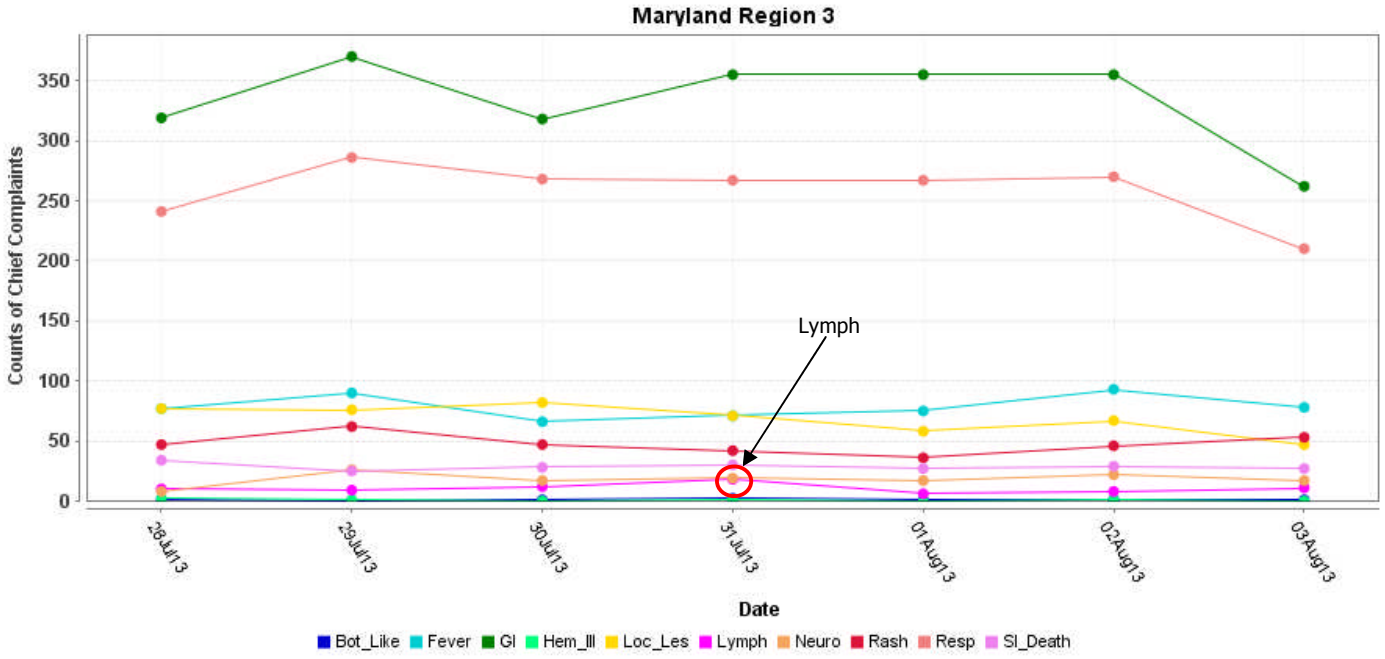


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

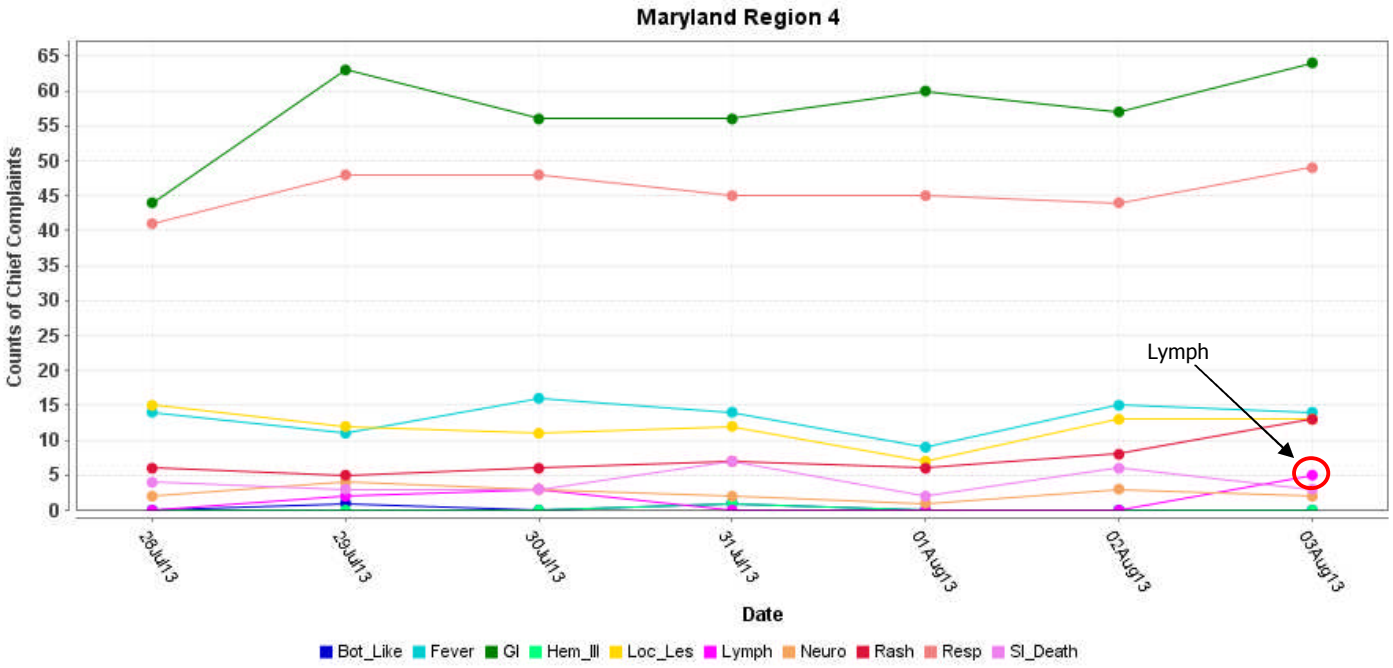
MARYLAND ESSENCE:



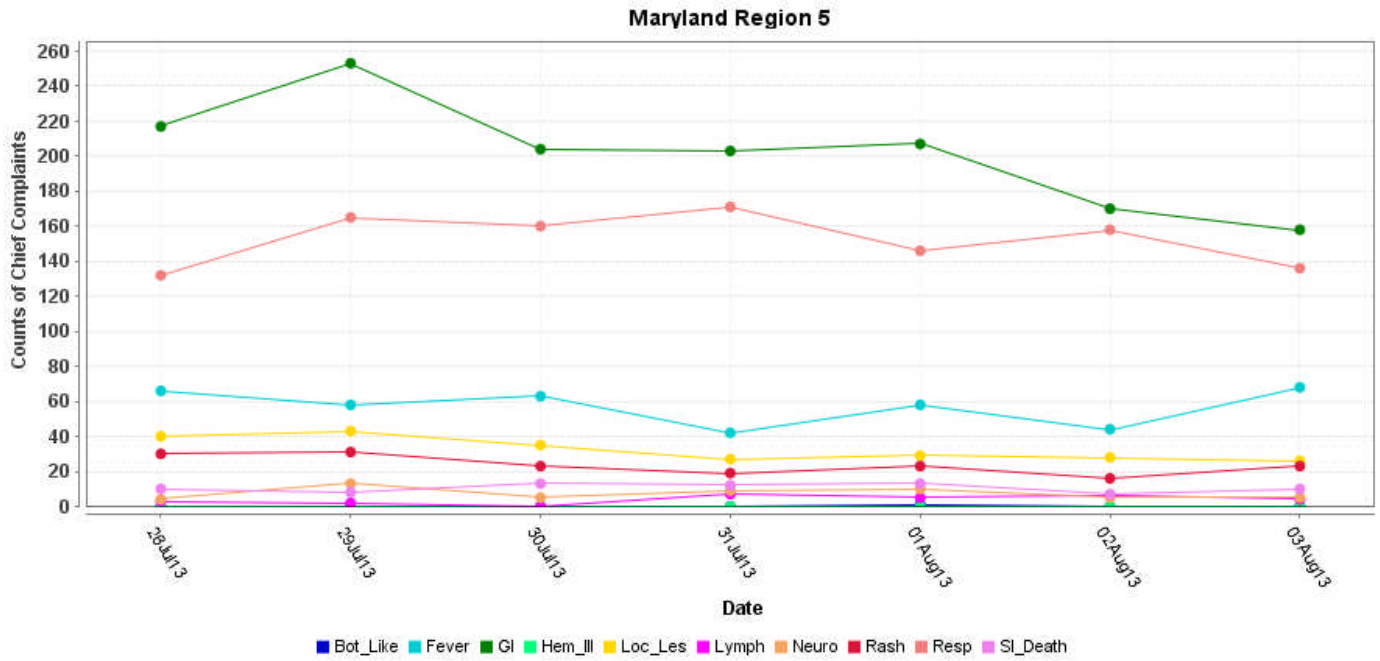
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



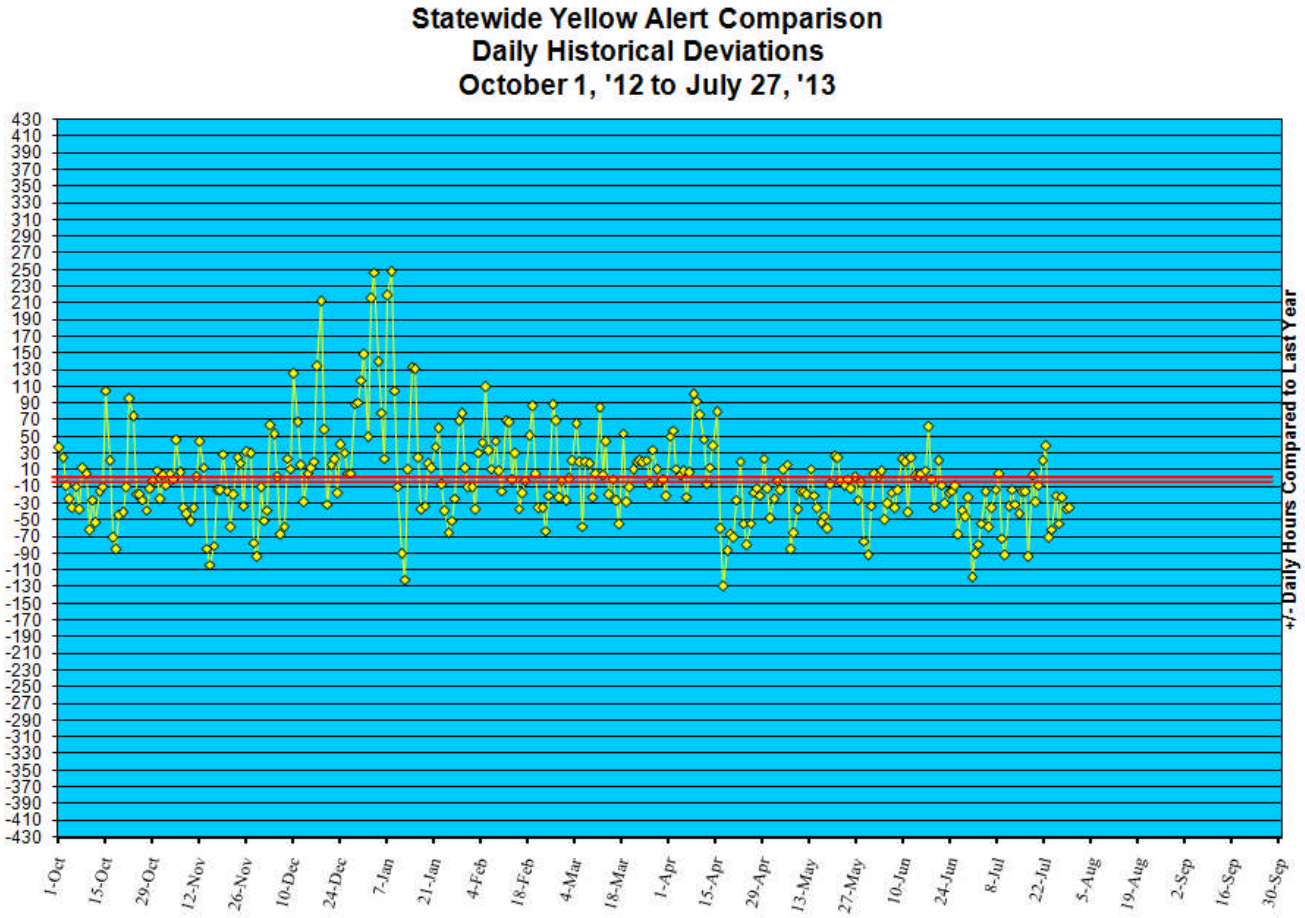
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (July 28 - August 3, 2013):	17	0
Prior week (July 21 - July 27, 2013):	11	0
Week#31, 2012 (July 30 – August 5, 2012):	12	0

1 outbreak was reported to DHMH during MMWR Week 31 (July 28 – August 3, 2013)

1 Rash Illness Outbreak
1 outbreak of SCABIES in an Institution

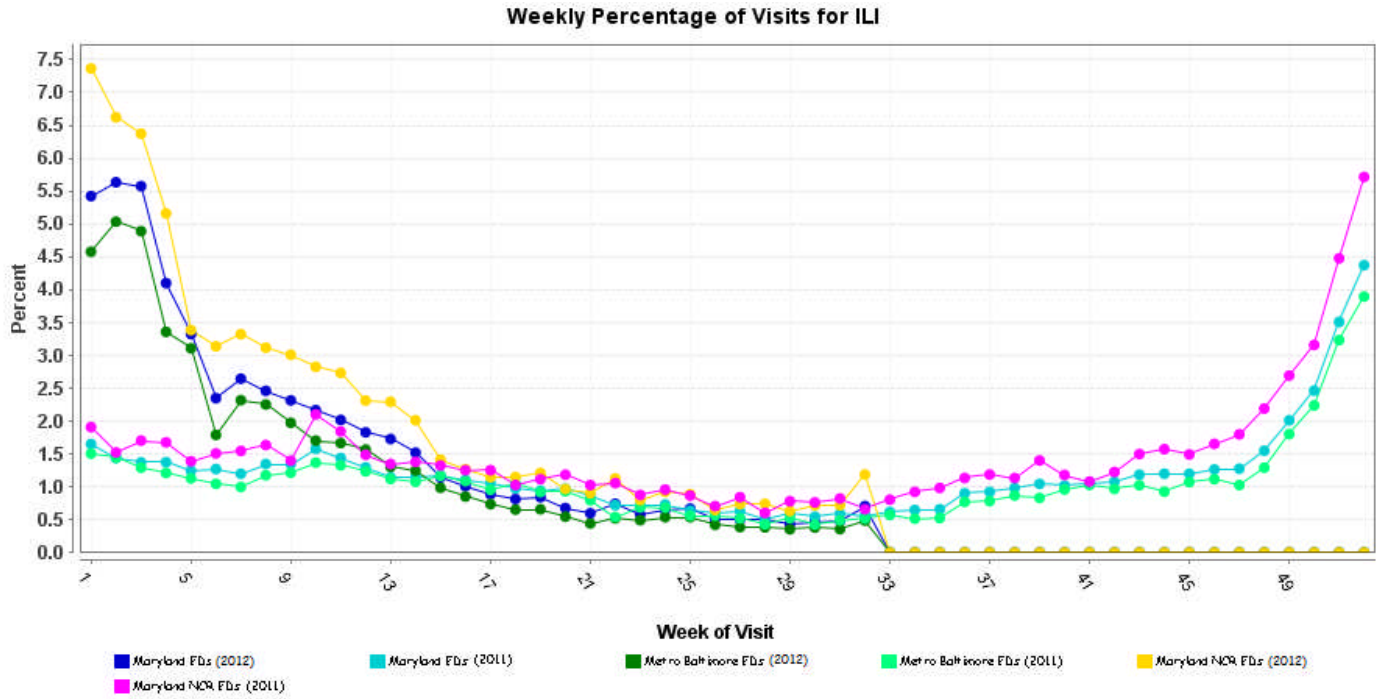
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

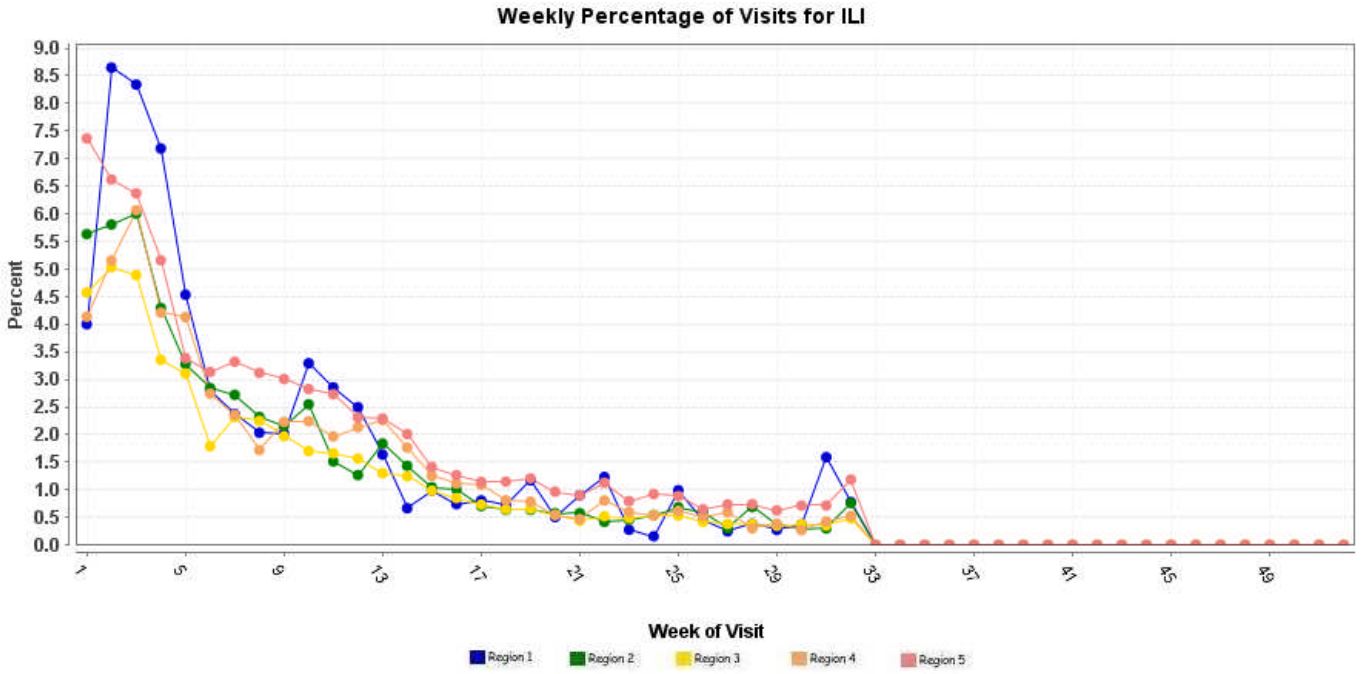
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



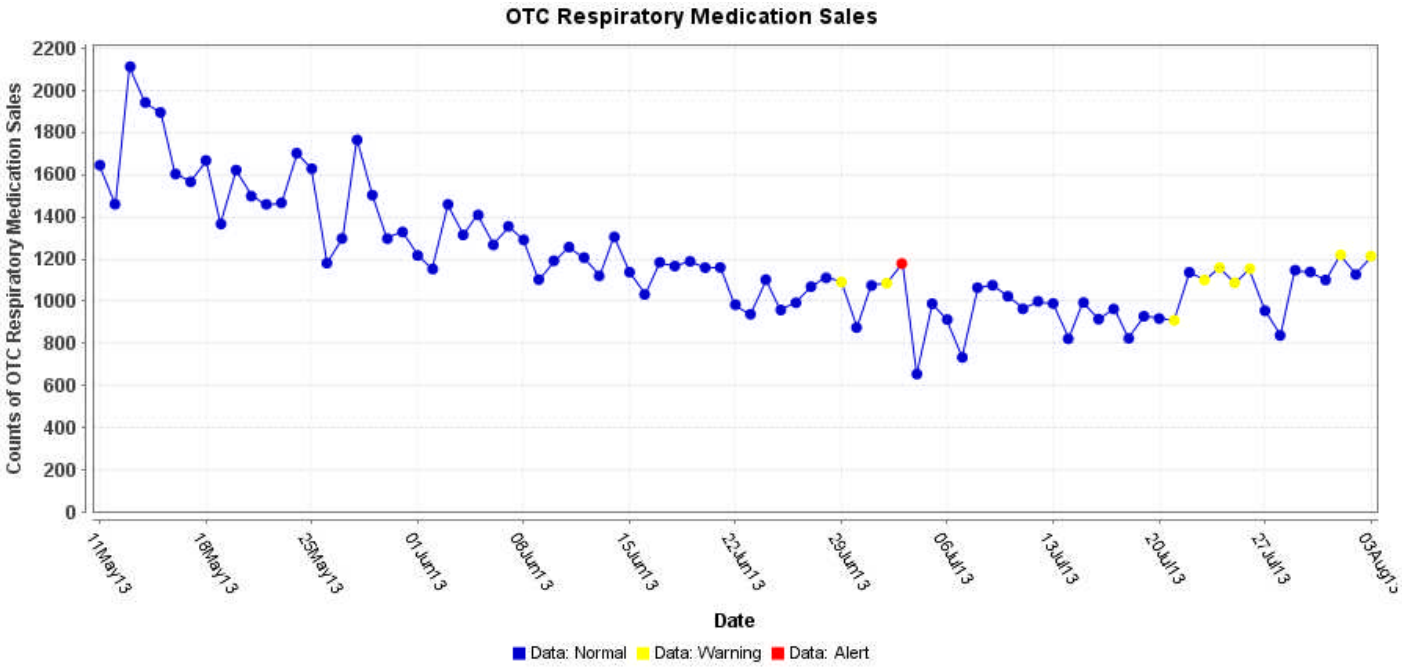
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of July 5, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 633, of which 377 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 60%.

NATIONAL DISEASE REPORTS*

LEGIONELLOSIS (OHIO): 30 July 2013, Another death has been attributed to the largest Legionnaires' outbreak in Ohio history this morning [30 Jul 2013], and health officials said they have concluded water tests and found the source of infection. The outbreak, which as of today [30 Jul 2013] has killed 5 and sickened 35, was caused by the potable water and air-conditioning cooling tower at Wesley Ridge Retirement Community in Reynoldsburg, [Ohio], said Franklin County Public Health spokeswoman Mitzi Kline. Kline said the retirement community has gone "above and beyond" in taking precautions to protect its residents, staff and visitors. The county, along with state and federal health officials, has worked with Wesley Ridge to stem the outbreak for 3 weeks. The retirement community has hyper-chlorinated its water once and superheated it twice. After the 1st effort, trace amounts of *Legionella* bacteria were found in the Parkside building. As of today [30 Jul 2013], water restrictions are lifted in all buildings except Parkside. Showering restrictions will be lifted if showerheads approved by the Centers for Disease Control and Prevention are installed or clean tests come back. Residents aren't supposed to drink or cook with water until negative results come back. The cooling tower is closed until a long-term prevention plan is in place, according to the county. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI EHEC (ARIZONA): 2 August 2013, Maricopa County health officials investigating a bloody diarrhea outbreak in the West Valley say the incidents are linked to Federico's Mexican Restaurant in Litchfield Park. According to the Maricopa County Department of Public Health, 11 of the 15 people affected have reported eating at the restaurant. A few of the patients are experiencing renal failure, said Dr. Bob England, director of the Maricopa County Departments of Public Health. The Maricopa County Environmental Service Department responded to these reports by inspecting the facility immediately and taking food samples. "The restaurant has been extremely cooperative with our investigation. In fact, out of an abundance of caution and concern for their customers, the restaurant is voluntarily closing," said Steven Goode, deputy director for MCESD. Laboratory results indicate the bacteria causing the illness is *E. coli O157*. This bacteria produces a toxin that can cause severe illness and, especially in children, can lead to kidney failure and even death. In these cases, the most prominent sign of the illness is bloody stool. Anyone who has eaten at this particular Federico's Mexican Food Restaurant on or after 23 Jul 2013 and is experiencing bloody diarrhea should seek medical attention. This location (13132 W. Camelback Rd.) is the only Federico's location where many of the patients have reported eating, England said. The investigation remains ongoing to determine the specific source. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CYCLOSPORIASIS (USA): 3 August 2013, On 30 Jul 2013, the states of Iowa and Nebraska announced that their analysis indicated that the outbreak [of cyclosporiasis] in those states was linked to a salad mix. In a follow-up to that announcement, the U.S. Food and Drug Administration is providing an update on its investigation. The FDA traceback investigation has confirmed that the salad mix identified by Iowa and Nebraska as being linked to the outbreak of cyclosporiasis in those states was supplied to restaurants in those states by Taylor Farms de Mexico, S. de R.L. de C.V., a processor of foodservice salads. The FDA traceback investigation found that illness clusters at 4 restaurants were traced to a common supplier, Taylor Farms de Mexico, S. de R.L. de C.V. FDA's investigation has not implicated consumer packages sold in grocery stores. Taylor Farms de Mexico, S. de R.L. de C.V. has been cooperating with all FDA requests during the investigation. The FDA and the firm will be conducting an environmental assessment of the firm's processing facility in Mexico to try to learn the probable cause of the outbreak and identify preventive controls to put in place to try and prevent a recurrence. The most recent inspection, in 2011, of the processing facility of Taylor Farms de Mexico, S. de R.L. de C.V. conducted by FDA found no notable issues. Additionally, as a result of the current investigation, FDA is increasing its surveillance efforts on green leafy products exported to the U.S. from Mexico. Mexican food regulatory authorities, the Federal Commission for Protection against Sanitary Risks (COFEPRIS), and the National Agro-Alimentary Health, Safety and Quality Service (SENASICA) are also collaborating with FDA in the investigation of this outbreak. The Iowa Department of Inspections and Appeals (DIA) and the Nebraska Department of Health and Human Services have announced that they believe the contaminated salad is no longer in the food supply in those states. The last date that someone reportedly became ill with cycloporiasis in Iowa was on 1 Jul 2013, and in Nebraska on 2 Jul 2013. The typical shelf life for a salad mix is up to 14 days. It is not yet clear whether the cases reported from other states are all part of the same outbreak. The investigation of increased cases of cyclosporiasis in other states continues. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

BOTULISM (NEW ZEALAND): 3 August 2013, Some Fonterra products used in infant formula and sports drinks may contain a bacterium that causes botulism, the company announced early today [3 Aug 2013]. Fonterra said that on Wednesday [31 Jul 2013] tests indicated the potential presence of a strain of Clostridium (*Clostridium botulinum*) in a whey concentrate sample, which can produce a potent neurotoxin that causes botulism. The company said that it today [3 Aug 2013] had advised 8 of its customers of a "quality issue" involving 3 batches of a particular type of whey protein concentrate

(WPC80) produced at a single New Zealand manufacturing site in May 2012. As a result, these customers are urgently investigating whether any of the affected product is in their supply chains. If need be, they will initiate consumer product recalls. There have been no reports of any illness linked to consumption of the affected whey protein, Fonterra said in a statement. Dairy products such as fresh milk, yoghurt, cheese, spreads and UHT milk products are not affected, it said. Fonterra had initially identified a potential quality issue in March 2013, when a product tested positive for *Clostridium*. There are hundreds of different strains of *Clostridium*, the majority of which are harmless, the company said. Product samples were put through intensive testing over the following months. On Wed 31 Jul 2013, tests indicated the potential presence of a strain (*Clostridium botulinum*) in a sample, which can cause botulism. The particular whey protein concentrate concerned is used by Fonterra's customers in a range of products including infant formula, growing up milk powder and sports drinks, said Gary Romano, Managing Director, NZ Milk Products. "For this reason, we immediately contacted our customers and the appropriate authorities so that any potentially affected product could be removed from the marketplace. We are working with our customers and will provide more information and updates as they become available," Mr Romano said. Fonterra told a news conference today [3 Aug 2013] that investigations had isolated the cause of the contamination. A piece of pipe was not sterilized properly and was used during production of 3 batches. The piece of equipment was subsequently cleaned and further product tested was clear. The organism is present in soils, and small amounts of dust accumulated in the pipe and triggered the contamination, the company said. Any consumer product recalls that may need to take place will be initiated by the respective food companies. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

LEGIONELLOSIS (SCOTLAND): 2 August 2013, There are now a total of 10 cases [of legionellosis] in the recent outbreak, all of which have been linked to the Renfrew area. One of the latest victims is recovering in hospital, and the other is responding well to treatment at home, health officials said. All of the previously infected people have since recovered. The 2 new cases were announced by NHS Greater Glasgow and Clyde following a meeting of an outbreak control team. All 10 cases have a direct or indirect link to the Renfrew area, and investigations into the source of the disease have been focused on the town. The 1st 5 patients diagnosed were treated in hospital, while the other 3 were treated at home. Legionnaires' disease is an uncommon but serious form of pneumonia caused by bacteria distributed widely in natural and artificial water supplies. Symptoms are headache, fever, dry cough, breathing difficulties, stomach pains and diarrhea. The *Legionella* bacteria are spread through aerosols produced from water such as water cooling towers, air conditioning units and showers. As a precaution, all active water cooling towers in Renfrew have been treated with chemicals that kill *Legionella*, and several towers have been sampled for the disease [bacteria]. The bacteria cannot be spread from person-to-person or contracted by drinking contaminated water. People in and around the Renfrew area are being advised that they can drink water and prepare food in the normal way. The health board, which is not disclosing whether the latest patients are male or female, said its public health protection unit is working with the Health and Safety Executive, Health Protection Scotland, Renfrewshire Council, and other local authorities to identify a possible source for the disease. Dr Gillian Penrice, consultant in public health, said: "We have notified all community GPs and our frontline hospital teams to keep this outbreak uppermost in their minds when dealing with patients displaying symptoms of headache, fever, dry cough, breathing difficulties, stomach pains and diarrhea." Anyone who has symptoms of Legionnaires' disease is urged to contact their GP or call NHS 24 on 08454 242 424. A report out last month [July 2013] revealed that dealing with an outbreak of the disease in Edinburgh last year [2012] cost the health service almost 750 000 pounds [USD 1.15 million]; 4 people died after catching the disease during that outbreak, with 45 people requiring hospital care. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CAMPYLOBACTERIOSIS, E. COLI EHEC (NEW ZEALAND): 29 July 2013, Severe food poisoning outbreaks linked to consumption of raw milk products have struck Waikato and Manawatu [regions], prompting a leading health expert to advise caution. Ministry of Health data released under the Official Information Act show 19 people were hospitalized in 2013 after consuming raw milk products. A total of 4 people were hospitalized in Waikato on 5 Mar 2013 after contracting potentially deadly *E. coli* infections. The next day 5 more people fell ill with the bacterium. In April 2013, 6 more were struck down with *Campylobacter*, which causes gastroenteritis. Scientists determined that consumption of raw milk products was a common factor. Massey University EpiLab director and food safety Professor Nigel French said people should think carefully about raw food. "We're not wanting to wrap people in cotton wool . . . I feel strongly that people should have the choice to eat raw food if they want to -- but they should do it in full knowledge of the potential risks to their health." Raw milk products are illegal in many countries, including Australia and Canada, and in Britain they must carry health warnings. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable